

Amendments to the Claims

1. (Previously Presented) A cDNA encoding a polypeptide comprising an amino acid sequence selected from the group consisting of (a) the amino acid sequence shown in SEQ ID NO:12 and (b) the amino acid sequence encoded by a cDNA insert contained within plasmid pCRII-TMSP3 (ATCC Accession No. PTA-3433).
2. (Original) The cDNA of claim 1 which comprises the nucleotide sequence shown in SEQ ID NO:11.
3. (Original) The cDNA of claim 1 which consists of the nucleotide sequence shown in SEQ ID NO:11.
4. (Original) The cDNA of claim 1 which comprises the cDNA insert of plasmid pCRII-TMSP3.
5. (Original) The cDNA of claim 1 which consists of the cDNA insert of plasmid pCRII-TMSP3.
6. (Previously Presented) An expression vector comprising a polynucleotide which encodes a polypeptide comprising an amino acid sequence selected from the group consisting of (a) the amino acid sequence shown in SEQ ID NO:12 and (b) the amino acid sequence encoded by a cDNA insert contained within plasmid pCRII-TMSP3 (ATCC Accession No. PTA-3433).
7. (Original) The expression vector of claim 6 wherein the polynucleotide comprises the nucleotide sequence shown in SEQ ID NO:11.

8. (Original) The expression vector of claim 6 wherein the polynucleotide consists of the nucleotide sequence shown in SEQ ID NO:11.
9. (Previously Presented) The expression vector of claim 6 wherein the polynucleotide comprises the coding sequence of the cDNA insert of plasmid pCRII-TMSP3.
10. (Previously Presented) The expression vector of claim 6 wherein the polynucleotide consists of the coding sequence of the cDNA insert of plasmid pCRII-TMSP3.
11. (Previously Presented) A host cell comprising an expression vector which encodes a polypeptide comprising an amino acid sequence selected from the group consisting of (a) the amino acid sequence shown in SEQ ID NO:12 and (b) the amino acid sequence encoded by a cDNA insert contained within plasmid pCRII-TMSP3 (ATCC Accession No. PTA-3433).
12. (Original) The host cell of claim 11 wherein the polynucleotide comprises the nucleotide sequence shown in SEQ ID NO:11.
13. (Original) The host cell of claim 11 wherein the polynucleotide consists of the nucleotide sequence shown in SEQ ID NO:11.
14. (Previously Presented) The host cell of claim 11 wherein the polynucleotide comprises the nucleotide coding sequence of the cDNA insert of plasmid pCRII-TMSP3.
15. (Previously Presented) The host cell of claim 11 wherein the polynucleotide consists of the nucleotide coding sequence of the cDNA insert of plasmid pCRII-TMSP3.
- 16-21. (Canceled)

22. (Previously Presented) A method of producing a polypeptide comprising an amino acid sequence selected from the group consisting of (a) the amino acid sequence shown in SEQ ID NO:12 and (b) the amino acid sequence encoded by a cDNA insert contained within plasmid pCRII-TMSP3 (ATCC Accession No. PTA-3433), comprising the steps of:

culturing a host cell comprising an expression vector that encodes the polypeptide under conditions whereby the polypeptide is expressed; and

isolating the polypeptide.

23. (Original) The method of claim 22 wherein the expression vector comprises the nucleotide sequence shown in SEQ ID NO:11.

24. (Previously Presented) The method of claim 22 wherein the expression vector comprises the coding sequence of the cDNA insert of plasmid pCRII-TMSP3.

25-68. (Canceled)

69. (Previously Presented) An isolated polynucleotide selected from the group consisting of: (a) a polynucleotide encoding a protein that comprises the amino acid sequence of SEQ ID NO:12, (b) a polynucleotide comprising the sequence of SEQ ID NO:11, (c) a polynucleotide comprising the coding sequence of a cDNA contained within plasmid pCRII-TMSP3 (ATCC Accession No. PTA-3433), and (d) a polynucleotide encoding a protein that comprises the amino acid sequence encoded by the cDNA of plasmid pCRII-TMSP3.

70. (Original) An expression vector comprising the polynucleotide of claim 69.

71. (Original) A host cell comprising the expression vector of claim 70.

72-73. (Canceled)

74. (Currently Amended) A polynucleotide probe selected from the group consisting of:

~~a first polynucleotide~~ consisting of at least 300 contiguous nucleotides of the complete complement of a polynucleotide having the nucleotide sequence shown in SEQ ID NO:11; and

~~a second polynucleotide that hybridizes under stringent conditions to the nucleotide sequence shown in SEQ ID NO:11, wherein the second polynucleotide is at least 96% identical in sequence to the complete complement of SEQ ID NO:11, wherein the second polynucleotide comprises at least 300 nucleotides, wherein the stringent conditions are selected so that the T_m of a hybrid between the second polynucleotide and the nucleotide sequence shown in SEQ ID NO:11 is approximately 12-20°C below the T_m of the hybrid calculated according to the formula~~

$$T_m = 81.5^{\circ}\text{C} - 16.6(\log_{10}[\text{Na}^+]) + 0.41(\%G + C) - 0.63(\%\text{formamide}) - 600/l,$$

~~where l = the length of the hybrid in basepairs,~~

~~wherein use of the polynucleotide probe in a hybridization assay detects a coding sequence for the amino acid sequence shown in SEQ ID NO:12.~~

75. (Currently Amended) A polynucleotide probe selected from the group consisting of:

~~a first polynucleotide~~ consisting of at least 300 contiguous nucleotides of the complete complement of a polynucleotide having the nucleotide sequence of the cDNA insert of plasmid pCRII-TMSP3 (ATCC Accession No. PTA-3433); and

~~a second polynucleotide that hybridizes under stringent conditions to the nucleotide sequence of the cDNA insert of plasmid pCRII-TMSP3, wherein the second polynucleotide is at least 96% identical in sequence to the complete complement of the nucleotide sequence of the cDNA insert of plasmid pCRII-TMSP3, wherein the second polynucleotide comprises at least~~

~~300 nucleotides, wherein the stringent conditions are selected so that the T_m of a hybrid between the second polynucleotide and the nucleotide sequence of the cDNA insert of plasmid pCRII-TMSP3 is approximately 12-20°C below the T_m of the hybrid calculated according to the formula~~

$$\text{ ~~} T_m = 81.5^{\circ}\text{C} - 16.6(\log_{10}[\text{Na}^+]) + 0.41(\%G + C) - 0.63(\%\text{formamide}) - 600/l,~~$$

~~where l = the length of the hybrid in basepairs,~~

~~wherein use of the polynucleotide probe in a hybridization assay detects a coding sequence for a polypeptide encoded by the cDNA insert of plasmid pCRII-TMSP3.~~

76-85. (Canceled)